AMENDMENTS TO THE CLAIMS:

This listing of claims will replace, without prejudice, all prior versions, and listings, of claims in the application.

LISTING OF THE CLAIMS:

1-16. (Canceled).

17. (Currently Amended) A method for exchanging messages containing data between at least two stations over a bus system, comprising:

repeatedly transmitting over the bus system, by a first station, a reference message containing time information of the first station at at least one specifiable time interval, the time interval being subdivided as a basic cycle into time windows, a pause period of variable duration being provided at an end of at least one basic cycle;

transmitting messages containing data in at least some of the time windows;

adapting the duration of the pause period ~~to change a time of a start of a next basic cycle~~; ~~and~~

determining a correction value based on a local time of a station and a cycle time, the correction value being used in adapting the duration of the pause period; and

compensating for a time deviation by correcting a time of a start of the basic cycle, and correcting the time by adapting the duration of the pause period;

wherein the time of the start of the basic cycle is corrected by one of lengthening and shortening the duration of at least one pause period.

18. (Canceled).

19. (Currently Amended) The method as recited in claim 17, wherein at least two bus systems are synchronized with one another, a time of a start of a basic cycle of a first bus system is corrected by adaptation of the duration of the pause period of a second bus system.

20. (Previously Presented) The method as recited in claim 17, wherein a pause period is provided at an end of every basic cycle.

21. (Previously Presented) The method as recited in claim 17, wherein a pause period is provided at an end of every 2nth basic cycle, where n corresponds to a natural number.

22. (Previously Presented) The method as recited in claim 17, wherein a pause period is provided at an end of every 2n+1th basic cycle, where n corresponds to a natural number.

23. (Previously Presented) The method as recited in claim 17, wherein, when data is exchanged, a pause period of variable duration is provided at an end of each of at least two basic cycles, by which a change of a start of a beginning of at least one basic cycle is corrected by adaptation of the duration of the at least two pause periods.

24. (Canceled).

25. (Currently Amended) The method as recited in claim 17[[24]], wherein the correction value is determined from a first difference between two local times of the station in two successive basic cycles.

26. (Currently Amended) The method as recited in claim [[25]] 17, wherein the correction value is determined from a second difference between two cycle times of two successive basic cycles.

27. (Previously Presented) The method as recited in claim 26, wherein the correction value is determined from a comparison value formed by a sum of the time interval of the basic cycle and the second difference.

28. (Currently Amended) The method as recited in claim [[27]] 25, wherein the correction value corresponds to the difference between the first difference and the comparison value.

29. (Previously Presented) The method as recited in claim 24, wherein at least two pause periods are provided in at least two basic cycles for exchanging data, and the correction value is distributed over the at least two pause periods in a specifiable manner.

30. (Previously Presented) The method as recited in claim 29, wherein the correction value is evenly distributed over the at least two pause periods.

31. (Currently Amended) A device for exchanging data in messages between at least two stations connected by a bus system, comprising:

a first arrangement at a first station configured to repeatedly transmit a reference message containing time information of the first station over the bus system at at least one specifiable time interval;

a second arrangement configured to subdivide the time interval as a basic cycle into time windows of specifiable length, the messages being transmitted in the time windows;

a third arrangement configured to provide a pause period of variable duration at an end of at least one basic cycle when data is exchanged, a start of a beginning of the basic cycle being corrected by adaptation of the duration of the pause period; and

a fourth arrangement to determine a correction value based on a local time of a station and a cycle time, the correction value being used in adapting the duration of the pause period;

wherein the time of the start of the basic cycle is corrected by one of lengthening and shortening the duration of at least one pause period.

32. (Currently Amended) A system having at least two stations for exchanging data in messages between the at least two stations, comprising:

a bus system which connects the two stations;

a first arrangement, at a first station, configured to transmit the messages containing the data over the bus system, the first station repeatedly transmitting a reference message containing time information of the first station over the bus system at at least one specifiable time interval;

a second arrangement configured to subdivide the time interval as a basic cycle into time windows of specifiable length, the messages being transmitted in the time windows;

a third arrangement configured to provide a pause period of variable duration at an end of at least one basic cycle when data is exchanged, a beginning of the basic cycle being corrected by adaptation of the duration of the pause period; and

a fourth arrangement to determine a correction value based on a local time of a station and a cycle time, the correction value being used in adapting the duration of the pause period;

wherein the time of the start of the basic cycle is corrected by one of lengthening and shortening the duration of at least one pause period.

33. (New) The method as recited in claim 17, wherein at least two bus systems are synchronized with one another, wherein a time of a start of a basic cycle of a first bus system is corrected by adapting a duration of the pause period of a second bus system, and wherein one of the following is satisfied:

(i) a pause period is provided at an end of every basic cycle,

(ii) a pause period is provided at an end of every 2nth basic cycle, where n corresponds to a natural number,

(iii) a pause period is provided at an end of every 2n+1th basic cycle, where n corresponds to a natural number, and

(iv) when data is exchanged, a pause period of variable duration is provided at an end of each of at least two basic cycles, by which a change of a start of a beginning of at least one basic cycle is corrected by adapting a duration of the at least two pause periods.

34. (New) The method as recited in claim 17, wherein the correction value is determined from a difference between the comparison value and a first difference between two local times of the station in two successive basic cycles, and wherein at least two pause periods are provided in at least two basic cycles for exchanging data, and the correction value is evenly distributed over the at least two pause periods.

35. (New) The method as recited in claim 17, wherein the correction value is determined from a comparison value formed by a sum of the time interval of the basic cycle and a second difference between two cycle times of two successive basic cycles, and wherein at least two pause periods are provided in at least two basic cycles for exchanging data, and the correction value is evenly distributed over the at least two pause periods.